

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF OHIO
EASTERN DIVISION

Clifford A. Lowe, et al.)	
)	CASE NO.: 1:19-CV-748-JG
Plaintiffs)	
v.)	JUDGE: JAMES S. GWIN
)	
ShieldMark, Inc., et al.)	
)	
Defendants)	

**DECLARATION OF CLIFFORD A. LOWE IN SUPPORT OF MOTION FOR
SUMMARY JUDGMENT ON THE CLAIM OF INFRINGEMENT OF THE '664
PATENT, AND THE DEFENSES OF INVALIDITY AND UNENFORCEABILITY TO
THE CLAIM OF INFRINGEMENT OF THE '220 PATENT**

I, CLIFFORD A. LOWE, do hereby declare that:

1. I am of full age and of sound mind and memory and have firsthand knowledge of the matters stated herein;
2. I graduated with a Bachelor of Science degree in Management and Marketing from the University of North Carolina Greensboro in 1994.
3. During college I worked part-time for the Patch Rubber Company in Roanoke Rapids, North Carolina, a division of Myers Industries, Inc., in Akron, Ohio.
4. Upon graduation in 1994, I continued working for Patch Rubber in their tape division, more particularly for the Advanced Traffic Markings Division.
5. From 1994 until the present day, I have worked extensively with adhesive products, particularly marking tapes and the like.
6. During the period 1992 – 1994, I wrote the job descriptions for operating all of the machines employed at Patch Rubber.

7. From 1994 until 2003, when I left Patch Rubber, I continued working for the Advanced Traffic Markings Division, and for my last three years I was the Director of that division.
8. I left Patch Rubber Company to start my own company, InSite Solutions, LLC, which I continue to operate to this day.
9. I am the inventor and owner of U.S. Patent No. 10,214,664 ("the 664 Patent") which I license exclusively to InSite Solutions LLC ("InSite").
10. I am the Managing Director of InSite.
11. InSite is engaged in the floor marking tape business, manufacturing, offering for sale and selling the floor marking tape having the commercial name "Superior Mark."
12. ShieldMark, Inc. ("ShieldMark") is a competitor of InSite in the floor marking tape business, offering for sale the floor marking tape having the commercial name "Mighty Line®"
13. While the application that issued as the '664 Patent was pending, I observed changes in ShieldMark's marketing of its Mighty Line® floor marking tape product.
14. While I had not previously seen advertising by ShieldMark promoting its Mighty Line® floor marking tape product as having beveled edges that limited its lifting from the floor when exposed to pallet drag and forklift traffic, I began to see such advertising in or about late 2015 into 2016.
15. At that time, I had a study done by SJR Research, LLC, an independent marketing firm, to confirm my observation. A copy of the study is attached to my declaration as Exhibit 1 and has Bates numbers ISL000157-165. The report confirmed my observation that ShieldMark was now promoting its Mighty Line® floor marking

tape product as having beveled edges limiting its lifting from the floor when exposed to pallet drag and forklift traffic.

16. InSite had sold the ShieldMark floor marking tape product beginning in about January of 2004 through about 2011.
17. At that time, InSite purchased the ShieldMark floor marking tape product from Ergomat which sold it under the commercial name DuraStripe.
18. At that time, I was aware that DuraStripe had beveled edges, but was equally aware that the shape of those edges was bull-nosed or duck-billed and for that reason did not limit lifting of the tape from the floor when exposed to pallet and forklift traffic.
19. Attached as Exhibits 4 and 5 are photographs taken by me of the DuraStripe edges.
20. At that time, the only DuraStripe advertisements I observed were those as seen in Exhibit 2, expressly disclaiming any warranty for damage from forklift traffic and pallets.
21. I later became aware of U.S. Patent No. 8,088,480 ("the '480 patent") issuing on January 3, 2012.
22. I understood at the time, as I know now, that the '480 Patent does not make any mention whatsoever of beveled edges and, in fact, the drawings of both patents depict a flat or square edge.
23. The die which ShieldMark touts as proving its tape product has always had beveled edges (Doc. 42, PageID #665) is only capable of producing an extrudate having either bull-nosed or duck-billed shape, consistent with my photographs and not the claimed edges of my invention.

24. As it cools, the hot polyvinyl chloride extrudate necessarily shrinks. Because of this fact, and the fact that the touted die is abruptly angled, the touted die cannot produce a tapered edge capable of lying flat on the floor and resisting lifting from the floor.
25. During the course of prosecution of the application of the '664 Patent, on or about May 24, 2018, I gave to the Patent Office the photograph of Exhibit 4 bearing Bates Number ISL 00095 showing the edges of the then current ShieldMark Mighty Line® floor marking tape product on the right and the previous ShieldMark floor marking tape product sold by Ergomat under the commercial name DuraStripe on the left.
26. I went about obtaining samples of the Mighty Line® floor marking tape now being advertised as having "beveled edges" and resisting removal from the floor. I discovered that the previous bullnose-edged or duck-billed ShieldMark tape product sold first under the DuraStripe brand name and later under the Mighty Line® brand name now had a tapered edge that laid flat on the floor so that it limited lifting of the tape from the floor and no longer had a bullnose or duck-billed edge.
27. Two of the samples I obtained at trade shows were used by my counsel to make the infringement charts which are an exhibit in support of this motion. (Exhibit 6).
28. The blue tape of Exhibit 6 can be seen on a table in the Booth No. 34412 occupied by ShieldMark at a trade show in a photograph (Exhibit 7) I took at that trade show on April 25, 2019.
29. The yellow tape of Exhibit 6 is from a roll of Mighty Line® floor marking tape purchased on August 13, 2019. The photograph of that roll bearing the commercial name, also part of Exhibit 6, was taken by me.

30. The activities of Defendants, of manufacturing, offering for sale and selling the Mighty Line® floor marking tape are without my authority.
31. In the context of the '220 patent, polyvinyl chloride and polycarbonate satisfy the Shore A Hardness of between 92 and 100. They would be interchangeable with each other in the context of the '220 patent's concern for Shore A Hardness. As to the thickness of the layer being between 20 mils and 65 mils, it is well to note that one mil is one-one thousandth (1/1000) of an inch. On average, a human hair is 1 mil thick. One thousand human hairs could lay side-by-side within an inch. Given the broad range advanced by the claim of a thickness between 20 mils and 65 mils, and in the context of an industrial floor marking tape, a polycarbonate layer having a thickness of 70 mils would, for all intents and purposes, be substantially the same as one being 65 mils in thickness. The difference would be inconsequential in the context of an industrial floor marking tape, and simply a matter of designer's choice to a person skilled in the art. This is particularly true in considering that the goal of the '220 patent is simply to have a plastic layer that is hard and durable.
32. A person skilled in the art would have known how to select an adhesive having characteristics, including its necessary thickness, to be suitable for adhering an industrial tape to a floor or the like.
33. A person skilled in the art and familiar with adhesives, and giving due regard to the environment and specific use of the tape, would have readily been able to determine the desired peel adhesion for the adhesive tape.
34. There are various tests for measuring peel adhesion. The test used does not impact the structure of the tape at all. It serves only to obtain a quantitative reading of the

adhesion characteristics of the tape. A person skilled in the art would know the various tests to employ for measuring peel adhesion consistent with industry standards. As noted by the Patent Office, monitoring or measurement of product features, such as peel adhesion, strength, and the like would be obvious to a person skilled in the art and adds nothing to the structure or material composition of the claims.

35. The test method used in monitoring peel adhesion strength and the like is simply a matter of artisan's choice. It does not change or impact the structure of the tape at all.
36. Selecting the desired peel adhesion is an obvious exercise to be employed by a tape or adhesive product designer. One simply needs to consider the application in which the adhesive is to be used and, by testing or trial and error, find the adhesive strength that allows the tape or product to perform under the conditions and in the environment anticipated. Adhesives are "off-the-shelf" products and readily obtainable for any of a wide variety of applications.
37. Laminating substrates or release liners for use on adhesive products to cover the adhesive until it is intended for use are extremely well known in the adhesive products industry. Having made a thermoplastic product with such a release liner or laminating substrate, it would have been obvious to use the same laminating substrate for a polycarbonate product.
38. Having used a pressure-sensitive adhesive for use with a polycarbonate, a person of ordinary skill in the art would have found it obvious to use a pressure-sensitive adhesive for the thermoplastic product.

I DECLARE under penalty of perjury under the laws of the United States of America that
the foregoing is true and correct.

Executed on:

Date: 4/16/2021

Executed by:


Clifford A. Lowe